

Biographies of Phasmatologists – 8. Robert Walter Campbell Shelford.

P.E. Bragg, 8 The Lane, Awworth, Nottinghamshire, NG16 2QP, U.K.

Abstract

Although little of his published work was on phasmids, Robert Shelford's work is significant because of the large number of Bornean phasmid specimens that he collected for the museums in Sarawak, Oxford and Cambridge. His life and phasmid work is outlined.

Key words

Phasmida, Phasmatologist, Robert Walter Campbell Shelford, Biography, Sarawak Museum.

Robert Walter Campbell Shelford (1872-1912)

Born 3rd August 1872 in Singapore, the son of a prominent British merchant. As a child, after an accident at the age of three, he developed a tubercular hip joint that incapacitated him for several years as a child. He became more mobile after an operation but was never able to participate in active sports as a child, although as an adult he enjoyed playing golf. The tuberculosis recurred in later life, and was the eventual cause of his death at an early age.

Shelford studied at King's College, London, and then at Emmanuel College, Cambridge. After graduating from Cambridge in 1895 he went to Yorkshire College in Leeds as a demonstrator in Biology. In 1897 he went to Sarawak as the Curator of the Sarawak Museum, a post he held for seven years. While he was at the Sarawak Museum quite a lot of specimens were sent to his old university at Cambridge.

In 1905 he left Sarawak Museum and returned to England. He went to Oxford and became an Assistant Curator of the Hope Department of Zoology at the University Museum. On his way back to England he collected many specimens which he gave to the Hope Collection in Oxford, in addition to "the vast collection of Bornean insects which he had presented [to the Hope Collection] during 1899-1901 while Curator of the Sarawak Museum" (Smith, 1986: 58).

It was at Oxford that he did most of his published research on phasmids. Most of his work at Oxford was on cockroaches, but he also worked on the other insects he had brought back from Borneo, and assisted in the library.

Shelford married Audrey Gurney from Bath on 25th June 1908. In April 1909 he slipped and the tubercular disease flared up and severely limited his work throughout the final three years of his life. Robert Shelford died at the age of 39 on 22nd June 1912.

Shelford's best-known publication, his book *A Naturalist in Borneo* (Shelford, 1916), was published several years after his death, having been completed by his Oxford colleague, Edward Poulton. The book was popular when originally published, and was reprinted in paperback by Oxford University Press in 1985.

Species named after Shelford

Shelford has had several Orthopteroid insects named after him. These include one Bornean mantis: *Deroplatys shelfordi* Kirby, 1903, one Bornean phasmid: *Baculofractum shelfordi* Bragg, 2005, two genera of cockroaches: *Shelfordella* Adelung, 1910 and *Shelfordina*



Hebard, 1929, and 17 species of cockroaches.

Shelford's phasmids

The vast majority of phasmid specimens in the Sarawak Museum in Kuching (SMSM) were collected during Shelford's time as curator, this is probably also the case for the majority of insect groups in the collection. Many of the Bornean specimens in both Oxford (OXUM) and Cambridge (CUMZ) University collections are also specimens collected during Shelford's time in Sarawak.

In 1901, Shelford briefly described the eggs of some phasmids that he referred to as "*Necroscia*, *Marmessoidea* and *Agondasoidea*". He also commented that "Phasmidae, notwithstanding their wonderful protective resemblance to sticks and leaves, are the staple form of diet of Trogons" [A family of birds].

In 1908 Shelford produced a catalogue of Central American phasmid species. This was based on Brunner (1907) & Redtenbacher's (1906 & 1908) publications, but includes some species that they omitted from their work.

Shelford only described five new species of Phasmida, based on work he did in Oxford. All were from South America and the descriptions were published in 1913, shortly after his death. These species are listed below.

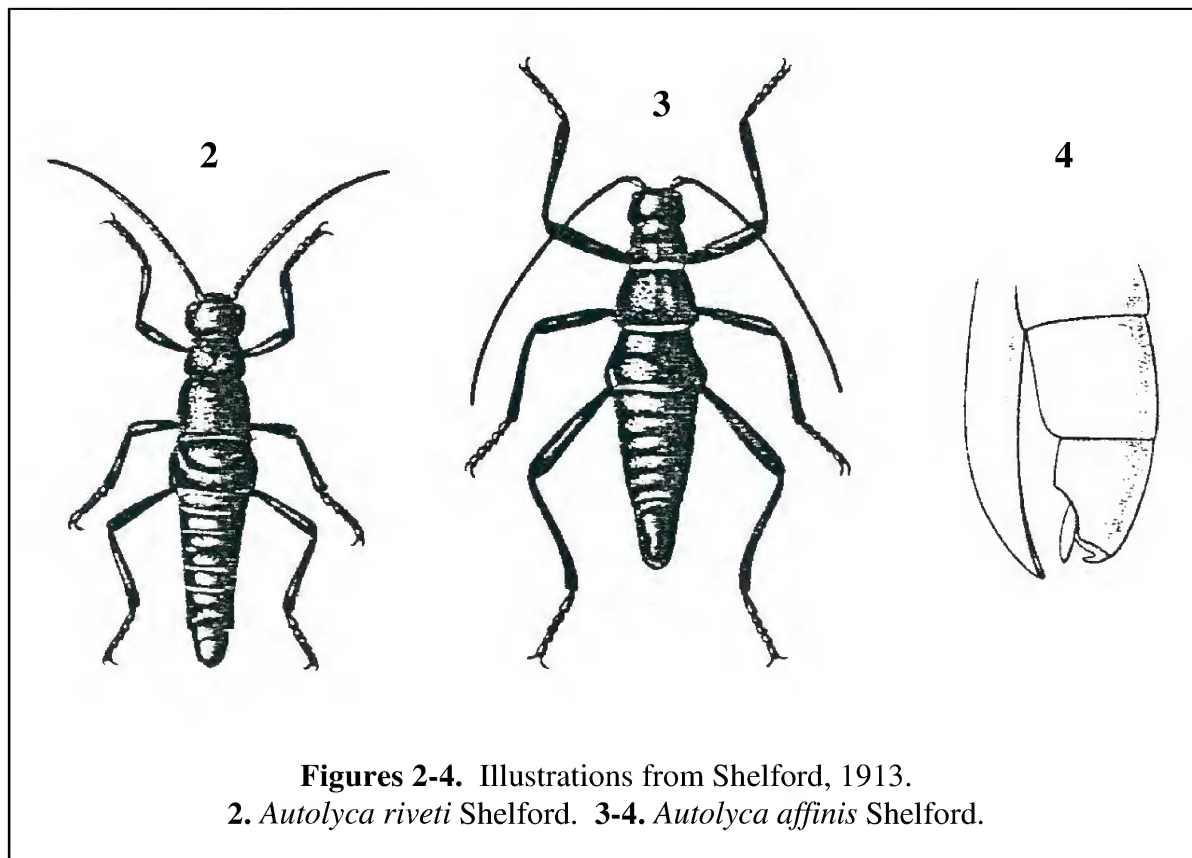
Autolyca affinis Shelford, 1913: 61, pl. 3.7 & 3.8.

Autolyca riveti Shelford, 1913: 60, pl. 3.6.

Libethra intermedia Shelford, 1913: 61.

Ocnophila nana Shelford, 1913: 61.

Ocnophila riveti Shelford, 1913: 62.



Figures 2-4. Illustrations from Shelford, 1913.

2. *Autolyca riveti* Shelford. **3-4.** *Autolyca affinis* Shelford.

His book, *A Naturalist in Borneo*, Shelford (1916: 147-155, 215, & 315) includes several references to phasmids. Shelford's observations of Bornean insects are based on both observation in the wild, and in captivity. He comments on the nocturnal habits of many

phasmids, and refers to his observations on “some that I have kept in captivity”. He then goes on to say that “Most of the winged species of Phasmidae, especially some with brightly coloured wings, are diurnal feeders, or at any rate feed as readily during the day when in captivity as during the night”. He makes several observations about eggs of phasmids in Borneo, and also reveals that he was keeping in England “a small colony of an “Indian Stick-Insect that has bred parthenogenetically for several generations” at the time he was writing his book.



Figure 6. *Baculofractum shelfordi* Bragg, 2005, holotype & paratype.

Acknowledgement

I thank Dr. A. Chung for providing figure 6, the photograph of *Baculofractum shelfordi*.

References

- Shelford, R. (1901)** Notes on some Bornean Insects. *Report of the British Association for the Advancement of Science*, 1901, p. 689-690.
- Shelford, R. (1908)** Family Phasmidae. in *Biologia Centrali-Americana, Orthoptera.*, Vol. 2. [The Phasmidae: 343-377, pl. 5-8.]
- Shelford, R. (1913)** Orthoptères. Blattides, Mantides et Phasmides. *Mission du Service Géographique de L'Armée pour la Mesure d'un Arc de Méridien Equatorial en Amérique du Sud sous le contrôle scientifique de L'Académie des Sciences, 1899-1906. Volume 10(1)*: 57-62, pl.3.
- Shelford, R.D. (1916)** *A Naturalist in Borneo*. T. Fisher Unwin Ltd., London.
- Smith, A.Z. (1986)** *A History of the Hope Entomological Collections in the University Museum, Oxford with lists of Archives and Collections*. Clarendon Press, Oxford.

Biologia Centrali-Americana is available online at:

http://www.sil.si.edu/digitalcollections/bca/bca_20_02_00/